

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re Application of:	§	Group Art Unit:	2623
	§	Examiner:	Shang, Annan Q.
Hensgen, et al.	§	Atty. Dkt. No.:	5266-05200
	§		
	§		
Serial No. 09/765,965	§		
	§		
	§		
Filed: January 19, 2001	§		
	§		
	§		
For: SYSTEM AND METHOD FOR	§		
PROVIDING MULT	§		
PERSPECTIVE INSTANT	§		
REPLAY	§		

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September 9, 2008

Date

APPEAL BRIEF

Mail Stop Appeal Brief - Patents

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Sir/Madam:

Further to the Notice dated July 9, 2008, Appellants present this Appeal Brief.
Appellants respectfully request that this appeal be considered by the Board of Patent
Appeals and Interferences.

I. REAL PARTY IN INTEREST

As evidenced by the assignment recorded at Reel/Frame 012001/0606, the subject application is owned by OpenTV, Inc., a corporation organized and existing under and by virtue of the laws of the State of Delaware, and now having its principal place of business at 275 Sacramento Street, San Francisco, CA 94111.

II. RELATED APPEALS AND INTERFERENCES

No other appeals, interferences or judicial proceedings are known which would be related to, directly affect or be directly affected by or have a bearing on the Board's decision in this appeal.

III. STATUS OF CLAIMS

Claims 1-5 and 7-56 are pending and rejected, and are the subject of this appeal. Claim 6 has been cancelled. A copy of claims 1-5 and 7-56 as on appeal is included in the Claims Appendix hereto.

IV. STATUS OF AMENDMEMNTS

No amendments to the claims have been submitted subsequent to the final rejection.

V. SUMMARY OF CLAIMED SUBJECT MATTER

The subject matter of the present claims generally relates to multi-perspective display in a broadcast television system.

Claims 1 recites a method for processing broadcasts, comprising:

- receiving a broadcast of a program, the broadcast containing a plurality of perspectives of the program, each of the perspectives providing a view of a given scene from a different angle (e.g., Fig 4, page 22, lines 8-21);
- presenting a first perspective of the plurality of perspectives to a viewer, said first perspective comprising a first perspective of a portion of the program (e.g., page 23, line 16 – page 24, line 13);
- storing at least one of the plurality of perspectives (e.g., page 29, lines 17-18);
- providing input from a viewer which indicates a desire to replay the portion of the program from a second perspective of the plurality of perspectives (e.g., page 24, lines 13-15);
- identifying in the first perspective a first point in time in the program which corresponds to the beginning of said portion, responsive to the input (e.g., page 27, lines 7-18);
- automatically determining a second point in time in the second perspective, wherein the second point in time comprises an approximation of the first point in time in the program (e.g., page 28, line 5 – page 29, line 11);
- presenting the portion of the program from the second perspective to the viewer beginning at the second point in time (e.g., page 23, line 16 – page 24, line 13); and
- periodically storing broadcast meta-data corresponding to each of one or more of the received plurality of perspectives of the program, said meta-data comprising at least time and/or offset information for each of the corresponding one or more plurality of perspectives (e.g., pages 26-29).

Claim 15 recites a method for playing a multi-perspective program comprising:

- receiving a broadcast of the program, the broadcast including a plurality of perspectives of the program, each of the perspectives providing a view of a given scene from a different angle (e.g., Fig 4, page 22, lines 8-21);
- recording at least one of the plurality of perspectives in a storage device (e.g., page 29, lines 17-18);
- sending a first perspective of the plurality of perspectives to a display, said first perspective comprising a first perspective of a portion of the program (e.g., page 23, line 16 – page 24, line 13);
- providing input from a viewer which indicates a desire to replay the portion of the program from a second perspective of the plurality of perspectives (e.g., page 24, lines 13-15);
- identifying in the first perspective a first point in time which corresponds to a beginning of the portion of the program, responsive to the input (e.g., page 27, lines 7-18);
- automatically determining a second point in time in the second perspective, wherein the second point in time comprises an approximation of the first point in time in the program;
- replaying the portion of the program from the second perspective beginning at the second point in time by sending the second perspective of the plurality of perspectives from the storage device to the display (e.g., page 23, line 16 – page 24, line 13); and
- periodically storing broadcast meta-data corresponding to each of one or more of the received plurality of perspectives of the program, said meta-data comprising at least time and/or offset information for each of the corresponding one or more plurality of perspectives (e.g., pages 26-29).

Claim 20 recites a system for recording a broadcast including a plurality of perspectives of a program, each of the perspectives providing a view of a given scene from a different angle, the system comprising:

- a receiver operable to receive the broadcast, the broadcast including at least one program (e.g., Fig 4, page 22, lines 8-21);

- a storage device coupled to the receiver (e.g., page 23, line 14);

- a processor operable to:

 - present at least a first perspective of the plurality of perspectives to a viewer, said first perspective comprising a first perspective of a portion of the program (e.g., page 23, line 16 – page 24, line 13);

 - record at least one of the plurality of perspectives in the storage device (e.g., page 29, lines 17-18);

 - receive input from a viewer which indicates a desire to replay the portion of the program from a second perspective of the plurality of perspectives (e.g., page 24, lines 13-15);

 - identify in the first perspective a first point in time in the program which corresponds to the beginning of said portion, in response to the input (e.g., page 27, lines 7-18); and

 - automatically determine a second point in time in the second perspective, wherein the second point in time comprises an approximation of the first point in time in the program (e.g., page 28, line 5 – page 29, line 11);

 - present the portion of the program from the second perspective to the viewer beginning at the second point in time (e.g., page 23, line 16 – page 24, line 13); and

 - periodically storing broadcast meta-data corresponding to each of one or more of the received plurality of perspectives of the program, said meta-data comprising at least time and/or offset information for each of the

corresponding one or more plurality of perspectives (e.g., pages 26-29).

Claim 31 recites a system for presenting broadcasts, comprising:

- a receiver configured to receive a broadcast including a plurality of perspectives of a program, each of the perspectives providing a view of a given scene from a different angle (e.g., Fig 4, page 22, lines 8-21);
- a storage device for storing at least one of the plurality of perspectives (e.g., page 23, line 14); and
- a processor configured to present a first perspective to a viewer while presenting at least a second, stored perspective to the viewer (e.g., page 23, line 16 – page 24, line 13);

wherein in presenting the second, stored perspective, the processor is configured to:

- receive input from a viewer which indicates a desire to replay a portion of the program from a second perspective of the plurality of perspectives (e.g., page 24, lines 13-15);
- identify in the first perspective a first point in time in the program which corresponds to the beginning of said portion, responsive to the input (e.g., page 27, lines 7-18);
- automatically determine a second point in time in the second perspective, wherein the second point in time comprises an approximation of the first point in time in the program (e.g., page 28, line 5 – page 29, line 11);
- present the portion of the program from the second, stored perspective beginning at the second point in time (e.g., page 23, line 16 – page 24, line 13); and
- periodically store broadcast meta-data corresponding to each of one or more of the received plurality of perspectives of the program, said

meta-data comprising at least time and/or offset information for each of the corresponding one or more plurality of perspectives (e.g., pages 26-29).

Claim 45 recites a computer program product for processing broadcasts, comprising a computer usable medium having machine readable code embodied therein for:

receiving a broadcast of a program, the broadcast containing a plurality of perspectives of the program, each of the perspectives providing a view of a given scene from a different angle e.g., Fig 4, page 22, lines 8-21);
presenting a first perspective of the plurality of perspectives to a viewer, said first perspective comprising a first perspective of a portion of the program (e.g., page 23, line 16 – page 24, line 13);
storing at least one of the plurality of perspectives (e.g., page 29, lines 17-18);
receiving input from a viewer which indicates a desire to replay the portion of the program from a second perspective of the plurality of perspectives (e.g., page 24, lines 13-15);
identifying in the first perspective a first point in time in the program which corresponds to the beginning of said portion, responsive to the input (e.g., page 27, lines 7-18);
automatically determining a second point in time in the second perspective, wherein the second point in time comprises an approximation of the first point in time in the program (e.g., page 28, line 5 – page 29, line 11);
presenting the portion of the program from the second perspective to the viewer beginning at the second point in time (e.g., page 23, line 16 – page 24, line 13); and
periodically storing broadcast meta-data corresponding to each of one or more of the received plurality of perspectives of the program, said meta-data

comprising at least time and/or offset information for each of the corresponding one or more plurality of perspectives (e.g., pages 26-29).

VI. GROUND OF REJECTION TO BE REVIEWED ON APPEAL

1. Claims 1-5, 7-22 and 25-26 stand rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,144,375 (hereinafter "Jain").
2. Claims 23-24 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Jain in view of U.S. Patent No. 6,289,165 (hereinafter "Abecassis").
3. Claims 1, 15, 20, 31 and 45 are rejected under 35 U.S.C. § 112.

VII. ARGUMENT

1. Claims 1-5, 7-22 and 25-26 stand rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,144,375 (hereinafter "Jain").

Claim 1 recites a method for processing broadcasts which includes:

“periodically storing broadcast meta-data corresponding to each of one or more of the received plurality of perspectives of the program, said meta-data comprising at least time and/or offset information for each of the corresponding one or more plurality of perspectives.”

Applicant has reviewed the portions of Jain cited by the examiner (Office Action dated April 16, 2007, last para. page 3 – first para. page 4) and submits Jain does not disclose at least the above features. Rather, Jain discloses storing multi-media data types in a multi-media database and storing video clips. For example, Jain discloses:

“...The system 300 thereby creates a database that synchronizes and associates multiple multi-media data types (such as video, audio, proximity sensor signals, and statistical information) with multi-media events of interest to an end user or client (such as fumbles, interceptions, etc.). These data types are stored ... in a relational object-oriented multi-media database.” (Jain, col. 20, lines 4-13).

“In one preferred embodiment, a highlight reel is defined as a set of “important” or extraordinary plays (i.e., video clips) ...The highlight reel is “published” by the highlight reel publisher 306 and provided as input to the inventive viewer method and apparatus 400 ... in one preferred embodiment of the present invention, the highlight reel is published to the well-known Internet to be subsequently obtained by the viewer process ... the inventive viewer process 400 executes on a

computer located at a user/client's home or business.” (Jain, col. 16, lines 10-22).

Additionally, Jain discloses the use of filtering criteria, and not the use of time and offset information, in the following:

“In the example of an American football program, the capture/filter process 304 accepts as input all of the video data streams provided by each video camera positioned proximate a football field. Additional inputs are provided by the setup process 302 and by additional data sources 318.” (Jain, col. 19, lines 9-13).

“In order to automate the creation of the highlight reel, the setup process 302 provides a set of pre-defined filtering criteria as inputs to the capture/filter process 304.” (Jain, col. 16, lines 62-65).

“... the following filtering criteria can be specified: (a) scoring plays (such as touchdowns, field goals, safeties, and two point conversions); (b) erroneous plays (such as interceptions, quarterback sacks and fumbles); (c) extraordinary plays (such as 4.sup.th downs that are not punts, passes and rushes greater than a specified number of yards, (d) key players can be specified (e.g., record all passes that player X caught), and (e) other user-defined plays. In the preferred embodiment, the filtering criteria can be established using Boolean operations based upon a set of primitive filtering constraints.” (Jain, col. 20, lines 21-31).

Jain further discloses the use of system user commands in the following:

“The system user interface 320 also allows a system user to aid the capture/filter process 304 in filtering the raw input and thereby creating a multi-media database. For example, in one preferred embodiment, the system user provides inputs that define event starting and ending points by providing "record" and "stop" control inputs to the system 300. The control inputs also include "delete", "save", and "override" controls.” (Jain, col. 19, lines 36-43).

While Jain does disclose the use of a time clock, this time clock is used as filtering criteria (318 in Fig. 4 and Fig. 6), which is described above. Additionally, Fig. 6-A discloses the video streams are input to block 317, and time clock, which is output by block 318, is not dependent upon the video streams. Time clock here in Jain refers to time of a football program and not time of each perspective of a program. Jain discloses the time clock in the following:

“Additional inputs are provided by the setup process 302 and by additional data sources 318. An example of an additional data source in the football example is a "Stat. Crew" data stream comprising continuous "play-by-play" statistical data associated with the football game under view. Examples of Stat. Crew data include derived statistical information such as "yards per carry" for a particular player, completions and interceptions for a particular quarterback, etc. Game clock information can be recovered from the Stat. Crew data stream.” (Jain, col. 19, lines 12-21).

“In addition, a Stat. Crew computer 318 provides statistical information (such as the time clock) to the CS 304 as described above.” (Jain, col. 21, lines 25-27).

For at least all of the above reasons, claim 1 is patentably distinct from the cited art.

Further, Applicant has reviewed the following portions of Jain cited as disclosing these features, but can find no such disclosure. The citations provided by the examiner are discussed below.

Col. 25, line 44 – col. 26, line 1+

This disclosure merely describes the display of favorite video events on a display in Fig. 7. A convenient access to the favorite video events for the system user is provided via the display and a possible cursor. This disclosure merely mentions multi-media

events are sequenced on a global system timeline, but does not describe any use of meta-data such as time information for each perspective of a program. The multi-media events may be created by filtering criteria or system user commands as described above. However, storage of meta-data for each perspective of a program is not disclosed.

Col. 27, line 33 – col. 28, line 1+

This disclosure merely describes displaying a best view of an object, player or event to the user. The criteria used to find a best view may include the proximity of the camera to the object, the direction of travel of a selected object, manual operation from the user, etc. As discussed above, event starting and ending points may be defined by user inputs (i.e. “record” and “stop” control inputs) or filtering criteria. However, the storage of meta-data for each perspective of a program is not disclosed for either determining a best view or determining an event.

In addition to the above, claim 1 recites “automatically determining a second point in time in the second perspective, wherein the second point in time comprises an approximation of the first point in time in the program”. Applicant has reviewed the cited reference and submits there is no disclosure of determining an approximation of the first point in time in the program. The cited portions in the Final Office Action suggested to teach these features instead teach (i) a user interface for selecting different perspectives of a program, (ii) VCR controls for altering the display in the video window, and (iii) presenting a best view of a particular object, player or event. There is no disclosure therein that describes (i) determining a second point in time in the second perspective of the program (ii) by approximating a first point in time in the first perspective. For at least these further reasons, claim 1 is patently distinguishable from the cited art.

In view of the above, Applicant submits claim 1 is patentably distinct from the cited art for at least these additional reasons. As each of independent claims 15, 20, 31 and 45 include features similar to those of claim 1, each of these claims are patentably distinct as well. As each of the dependent claims includes the features of the independent claims on which they depend, each of the dependent claims are patentably distinct for at least the above reasons. Accordingly, all claims are distinguishable from the cited art.

In view of the above, Applicant submits Jain clearly does not anticipate claim 1. Further, as each of independent claims 15, 20, 31 and 45 include features similar to those discussed above, each of the claims is patentably distinguishable from Jain for at least the above reasons as well.

Still further, the dependent claims recite further features neither disclosed nor suggested by the cited art.

For example, claim 8 recites the additional features “wherein identifying the first point in time in the first perspective comprises identifying a first offset in a stored file corresponding to the first perspective”. The same portion of Jain cited as disclosing the features of claim 1 is cited as disclosing these features as well. However, as already discussed earlier, this disclosure of Jain merely describes the display of favorite video events on a display in Fig. 7. Also, it describes multi-media events are sequenced on a global system timeline, but does not describe any use of meta-data such as time information for each perspective of a program. Rather, the multi-media events are created by filtering criteria or system user commands as described above. Accordingly, claim 8 is not anticipated by Jain. Claims 16, 25, 36 include features similar to that of claim 8 and are similarly distinguishable from Jain.

Additionally, Claims 11-12 recite particular features regarding the determining of the second point in time in the second perspective of the program. There is nothing in the

entirety of Jain that remotely resembles such features. For example, claim 12 recites the further features:

“wherein determining the second point in time in the second perspective comprises:

searching stored meta-data to identify two consecutive offsets corresponding to the first perspective, such that the interval represented by the two consecutive offsets includes the first offset;

utilizing a stored time corresponding to each of the two consecutive offsets to determine an approximated point in time;

searching stored meta-data to identify two consecutive times corresponding to the second perspective, such that the interval represented by the two consecutive times includes the approximated point in time;

utilizing a stored offset corresponding to each of the two consecutive times to determine an approximated offset; and

locating an offset in the second perspective which is near the approximated offset.”

Such features are entirely and wholly absent from the cited art. Further, there is nothing in the cited art which remotely suggests such features.

Claims 13-14 recite features directed to offsets in relation to MPEG I-frames. It is suggested that Jain discloses these features at col. 22, lines 43-67). However, on the contrary, Jain merely states that video clips stored in the system database are encoded using a well-known video encoding and compression method. Jain discloses nothing concerning the offsets or approximated offset as recited in the claims.

Still further, claim 56 recites features directed to interpolation which is nowhere disclosed by the cited art.

In the Final Office Action, the Examiner states:

“... applicant discusses the prior arts of record and the claimed invention and argues that Jain “...does not describe any use of meta-data such as time information for each perspective of the program...” ... (see page labeled 14/20+ of applicant's Remarks).”

However, as the several examples of disclosures from Jain show above, neither the database nor the publisher disclose the features recited in the independent claims, which discloses the contents of a meta-data file that can be stored with each recorded perspective. The at least time and/or offset information, such as number of bytes, may be used to locate a same scene among two or more variable-rate streams. Jain, as discussed above, discloses the use of multi-media events, but nowhere discloses the use of meta-data. In the Final Office Action, the Examiner does not provide any examples of the use of meta-data in Jain. Rather, the Examiner merely states:

“In response, Examiner disagrees. Examiner notes applicant's arguments, however, Jain disclose transmitting meta-data with the various perspective of the program, where a user interacts to playback (replay) portion of the program (the first, second, third, etc., perspectives).”

Again, for playback (replay), there are several examples in Jain of the use of events, but nowhere does Jain disclose the use of meta-data, such as “at least time and/or offset information for each of the corresponding one or more plurality of perspectives.” The Examiner fails to cite disclosures in Jain that describe these features.

In addition, in the Final Office Action, the Examiner states:

“... applicant discusses the prior arts of record and the claimed invention and argues ... that “...there is no disclosure of determining

an approximation of the first point in time in the program..." that "...determining a second point in time in the second perspective of the program by approximating a first point in time..." (see page labeled 14/20+ of applicant's Remarks)."

"... Jain further inherently teaches the claim limitations "...determining an approximation of the first point in time in the program ... determining a second point in time in the second perspective of the program by approximating a first point in time..." since Jain discloses that, the switching is seamless and dynamic and that different viewing perspectives are achieve, by the system automatically switching control to the camera having the best perspective (figs.7-9, col.25, lines 44-col.26, line 67, col.27, line 1-col.28, line 48 and col.30, line 17+)."

First, as there is no meta-data disclosed by Jain as discussed above, there is no "first point in time" and "second point in time" in Jain as recited by the independent claims. Second, the disclosures listed above do not disclose the features either. It is also noted that no specific disclosure is provided, but at times, an entire column. These disclosures of Jain teach the use of a multi-media database and teach the sequencing of multi-media events on a global timeline, rather than disclosing "determining a second point in time in the second perspective of the program by approximating a first point in time". The Examiner merely repeated previously given disclosures without comment on the disclosed multi-media events and sequencing on a global timeline. The Examiner states in the Final Office Action:

"Jain further inherently teaches the claim limitations "...determining an approximation of the first point in time in the program ... determining a second point in time in the second perspective of the program by approximating a first point in time..." since Jain discloses that, the switching is seamless and dynamic and that different viewing perspectives are achieve, by the system automatically switching control to the camera having the best perspective ..." (emphasis added).

However, Applicant disagrees. The fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result

or characteristic. *In re Rijckaert*, 9 F.3d 1531, 1534, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993); *In re Oelrich*, 666 F.2d 578, 581-82, 212 USPQ 323, 326 (CCPA 1981). "To establish inherency, the extrinsic evidence 'must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.' " *In re Robertson*, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999). However, several times Jain discloses the use of global sequencing of multi-media events. Therefore, switching from a first perspective to a second perspective, such as a camera having a best perspective, is decided by the capture/filter process 304. This process 304 filters raw input in order to create a multi-media database. Filtering criteria are disclosed in Jain, col. 20 lines 21-31, and do not include meta-data such as time and/or offset information as recited in the claims. This correlates with the lack of support in Jain for features disclosed in at least claim 56 regarding interpolation. Accordingly, the above features are not inherent as suggested.

2. Claims 23-24 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Jain in view of U.S. Patent No. 6,289,165 (hereinafter "Abecassis").

Claims 23 and 24 are dependent upon claim 20 and are patentably distinct for at least the reasons given above in relation to claim 20.

3. Claims 1, 15, 20, 31 and 45 are rejected under 35 U.S.C. § 112.

In the Final Office Action, claims 1, 15, 20, 31 and 45 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. Specifically, the Examiner states:

“The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. In particular, the specification does not disclose that "...periodically storing broadcast meta-data corresponding to each one or more of the received plurality of perspectives of the program..." It is unclear as to where support is found for the amended claim limitations.”

Applicant respectfully disagrees and submits the claims do comply with 35 U.S.C. § 112. First, the highlighted features were originally recited by dependent claims 6, 16, 25, 36 and 47, which form part of the original specification. Second, FIG. 11 of the Specification and pages 26-29 of the Specification support the features recited by present independent claims 1, 15, 20, 31 and 45. Finally, Applicant submits both the claim language and the description are quite clear and those skilled in the art would have no difficulty in making or using the features described therein. In particular, the claims recite features directed to the periodic storage of data which Applicant submits is understandable by those skilled in the art. Accordingly, Applicant submits claims 1, 15, 20, 31, and 45 comply with 35 U.S.C. § 112.

Conclusion

For the foregoing reasons, it is submitted that the Examiner's rejection of claims 1-5 and 7-56 was improper, and reversal of the examiner's decision is respectfully requested.

If any extension of time (under 37 C.F.R. § 1.136) is necessary to prevent the above referenced application from becoming abandoned, Applicant hereby petitions for such an extension. the Commissioner is hereby authorized to charge any fees which may be required to Deposit Account No. 501505/5266-05200/RDR.

Respectfully submitted,

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Date: September 9, 2008

VIII. CLAIMS APPENDIX

The claims on appeal are as follows.

1. (Previously Presented) A method for processing broadcasts, comprising:

receiving a broadcast of a program, the broadcast containing a plurality of perspectives of the program, each of the perspectives providing a view of a given scene from a different angle;

presenting a first perspective of the plurality of perspectives to a viewer, said first perspective comprising a first perspective of a portion of the program;

storing at least one of the plurality of perspectives;

providing input from a viewer which indicates a desire to replay the portion of the program from a second perspective of the plurality of perspectives;

identifying in the first perspective a first point in time in the program which corresponds to the beginning of said portion, responsive to the input;

automatically determining a second point in time in the second perspective, wherein the second point in time comprises an approximation of the first point in time in the program;

presenting the portion of the program from the second perspective to the viewer beginning at the second point in time; and

periodically storing broadcast meta-data corresponding to each of one or more of the received plurality of perspectives of the program, said meta-data comprising at least time and/or offset information for each of the corresponding one or more plurality of perspectives.

2. (Original) The method as recited in claim 1, wherein presenting the first perspective and storing are performed simultaneously.

3. (Original) The method as recited in claim 1, wherein storing the at least one of the plurality of perspectives is performed automatically.

4. (Original) The method as recited in claim 1, wherein presenting at least one of the plurality of perspectives includes presenting at least one of the stored perspectives.

5. (Original) The method as recited in claim 4, wherein presenting at least one of the plurality of perspectives and storing are performed simultaneously.

6. (Canceled).

7. (Previously Presented) The method as recited in claim 1, wherein receiving the broadcast includes simultaneously receiving a plurality of related video streams, each stream including one of the perspectives.

8. (Previously Presented) The method as recited in claim 1, wherein identifying the first point in time in the first perspective comprises identifying a first offset in a stored file corresponding to the first perspective.

9. (Original) The method as recited in claim 1, wherein presenting the first perspective includes presenting the first perspective in one window of a display and

presenting at least one of the plurality of perspectives includes presenting a second perspective from the plurality of stored perspectives in a different window of the display.

10. (Original) The method as recited in claim 1, wherein storing at least one of the plurality of perspectives includes storing the perspectives in at least one circular buffer.

11. (Previously Presented) The method as recited in claim 8, wherein determining the second point in time in the second perspective comprises locating an offset in the second perspective which is near the first offset.

12. (Previously Presented) The method as recited in claim 8, wherein determining the second point in time in the second perspective comprises:

searching stored meta-data to identify two consecutive offsets corresponding to the first perspective, such that the interval represented by the two consecutive offsets includes the first offset;

utilizing a stored time corresponding to each of the two consecutive offsets to determine an approximated point in time;

searching stored meta-data to identify two consecutive times corresponding to the second perspective, such that the interval represented by the two consecutive times includes the approximated point in time;

utilizing a stored offset corresponding to each of the two consecutive times to determine an approximated offset; and

locating an offset in the second perspective which is near the approximated offset.

13. (Previously Presented) The method as recited in claim 11, wherein the plurality of perspectives of the program comprise MPEG data streams, and wherein the offset in the second perspective which is near the first offset corresponds to an MPEG I-frame.

14. (Previously Presented) The method as recited in claim 12, wherein the plurality of perspectives of the program comprise MPEG data streams, and wherein the offset in the second perspective which is near the approximated offset corresponds to an MPEG I-frame.

15. (Previously Presented) A method for playing a multi-perspective program comprising:

receiving a broadcast of the program, the broadcast including a plurality of perspectives of the program, each of the perspectives providing a view of a given scene from a different angle;

recording at least one of the plurality of perspectives in a storage device;

sending a first perspective of the plurality of perspectives to a display, said first perspective comprising a first perspective of a portion of the program;

providing input from a viewer which indicates a desire to replay the portion of the program from a second perspective of the plurality of perspectives;

identifying in the first perspective a first point in time which corresponds to a beginning of the portion of the program, responsive to the input;

automatically determining a second point in time in the second perspective, wherein the second point in time comprises an approximation of the first point in time in the program;

replaying the portion of the program from the second perspective beginning at the second point in time by sending the second perspective of the plurality of perspectives from the storage device to the display; and

periodically storing broadcast meta-data corresponding to each of one or more of the received plurality of perspectives of the program, said meta-data comprising at least time and/or offset information for each of the corresponding one or more plurality of perspectives.

16. (Previously Presented) The method as recited in claim 15, wherein identifying the first point in time in the first perspective comprises identifying a first offset in a stored file corresponding to the first perspective.

17. (Original) The method as recited in claim 15, further comprising sending the second perspective to one window in the display to play the portion of the program from the second perspective concurrently with sending the first perspective to a different window in the display.

18. (Previously Presented) The method as recited in claim 16, wherein determining the second point in time in the second perspective comprises locating an offset in the second perspective which is near the first offset.

19. (Original) The method as recited in claim 15, wherein determining the second point in time in the second perspective comprises:

searching stored meta-data to identify two consecutive offsets corresponding to the first perspective, such that the interval represented by the two consecutive offsets includes the first offset;

utilizing a stored time corresponding to each of the two consecutive offsets to determine an approximated point in time;

searching stored meta-data to identify two consecutive times corresponding to the second perspective, such that the interval represented by the two consecutive times includes the approximated point in time;

utilizing a stored offset corresponding to each of the two consecutive times to determine an approximated offset; and

locating an offset in the second perspective which is near the approximated offset.

20. (Previously Presented) A system for recording a broadcast including a plurality of perspectives of a program, each of the perspectives providing a view of a given scene from a different angle, the system comprising:

a receiver operable to receive the broadcast, the broadcast including at least one program;

a storage device coupled to the receiver;

a processor operable to:

present at least a first perspective of the plurality of perspectives to a viewer, said first perspective comprising a first perspective of a portion of the program;

record at least one of the plurality of perspectives in the storage device;

receive input from a viewer which indicates a desire to replay the portion of the program from a second perspective of the plurality of perspectives;

identify in the first perspective a first point in time in the program which corresponds to the beginning of said portion, in response to the input; and

automatically determine a second point in time in the second perspective, wherein the second point in time comprises an approximation of the first point in time in the program;

present the portion of the program from the second perspective to the viewer beginning at the second point in time; and

periodically storing broadcast meta-data corresponding to each of one or more of the received plurality of perspectives of the program, said meta-data comprising at least time and/or offset information for each of the corresponding one or more plurality of perspectives.

21. (Original) The system as recited in claim 20, further configured to record the perspectives automatically.

22. (Original) The system as recited in claim 20, further configured to present the recorded perspectives to the viewer without interrupting the recording of the broadcast.

23. (Original) The system as recited in claim 20, wherein the receiver is a set top box.

24. (Previously Presented) The system as recited in claim 22, wherein the storage device is contained within the set top box or is removably coupled to the set top box.

25. (Previously Presented) The system as recited in claim 20, wherein identifying the first point in time in the first perspective comprises identifying a first offset in a stored file corresponding to the first perspective.

26. (Previously Presented) The system as recited in claim 20, wherein the storage device is selected from the group consisting of: a magnetic disk, an optical disk, and a flash memory.

27. (Previously Presented) The system as recited in claim 25, wherein determining the second point in time in the second perspective comprises locating an offset in the second perspective which is near the first offset.

28. (Previously Presented) The system as recited in claim 25, wherein determining the second point in time in the second perspective comprises:

searching stored meta-data to identify two consecutive offsets corresponding to the first perspective, such that the interval represented by the two consecutive offsets includes the first offset;

utilizing a stored time corresponding to each of the two consecutive offsets to determine an approximated point in time;

searching stored meta-data to identify two consecutive times corresponding to the second perspective, such that the interval represented by the two consecutive times includes the approximated point in time; and

utilizing a stored offset corresponding to each of the two consecutive times to determine an approximated offset;

locating an offset in the second perspective which is near the approximated offset.

29. (Original) The system as recited in claim 20, wherein the receiver comprises at least one tuner.

30. (Original) The system as recited in claim 29, wherein the receiver comprises a demultiplexer and a processor.

31. (Previously Presented) A system for presenting broadcasts, comprising:

a receiver configured to receive a broadcast including a plurality of perspectives of a program, each of the perspectives providing a view of a given scene from a different angle;

a storage device for storing at least one of the plurality of perspectives; and

a processor configured to present a first perspective to a viewer while presenting at least a second, stored perspective to the viewer;

wherein in presenting the second, stored perspective, the processor is configured to:

receive input from a viewer which indicates a desire to replay a portion of the program from a second perspective of the plurality of perspectives;

identify in the first perspective a first point in time in the program which corresponds to the beginning of said portion, responsive to the input;

automatically determine a second point in time in the second perspective, wherein the second point in time comprises an approximation of the first point in time in the program;

present the portion of the program from the second, stored perspective beginning at the second point in time; and

periodically store broadcast meta-data corresponding to each of one or more of the received plurality of perspectives of the program, said meta-data comprising at least time and/or offset information for each of the corresponding one or more plurality of perspectives.

32. (Original) The system as recited in claim 31, wherein the first perspective is a stored perspective.

33. (Original) The system as recited in claim 31, wherein the storage device is configured to store the at least one perspective automatically.

34. (Original) The system as recited in claim 31, further configured to store the at least one perspective simultaneously with presenting the first perspective.

35. (Original) The system as recited in claim 31, further configured to store the at least one perspective simultaneously with presenting the second perspective.

36. (Currently Amended) The system as recited in claim 31, wherein identifying the first point in time in the first perspective comprises identifying a first offset in a stored file corresponding to the first perspective.

37. (Original) The system as recited in claim 36, wherein the processor is configured to present the first perspective in a first window on the display and the second perspective in a second window on the display.

38. (Original) The system as recited in claim 37, wherein one of the first and second windows is nested inside the other of the first and second windows.

39. (Previously Presented) The system as recited in claim 31, wherein the receiver is configured to simultaneously receive a plurality of audio and/or video streams associated with the plurality of perspectives.

40. (Previously Presented) The system as recited in claim 39, wherein each of the audio and/or video streams includes one of the perspectives.

41. (Previously Presented) The system as recited in claim 36, wherein determining the second point in time in the second perspective comprises locating an offset in the second perspective which is near the first offset.

42. (Previously Presented) The system as recited in claim 36, wherein determining the second point in time in the second perspective comprises:

searching stored meta-data to identify two consecutive offsets corresponding to the first perspective, such that the interval represented by the two consecutive offsets includes the first offset;

utilizing a stored time corresponding to each of the two consecutive offsets to determine an approximated point in time;

searching stored meta-data to identify two consecutive times corresponding to the second perspective, such that the interval represented by the two consecutive times includes the approximated point in time; and

utilizing a stored offset corresponding to each of the two consecutive times to determine an approximated offset;

locating an offset in the second perspective which is near the approximated offset.

43. (Original) The system as recited in claim 31, wherein the storage device includes at least one circular buffer for storing at least one of the plurality of perspectives.

44. (Original) The system as recited in claim 31, wherein the processor is configured to search at least one of the stored perspectives.

45. (Previously Presented) A computer program product for processing broadcasts, comprising a computer usable medium having machine readable code embodied therein for:

receiving a broadcast of a program, the broadcast containing a plurality of perspectives of the program, each of the perspectives providing a view of a given scene from a different angle;

presenting a first perspective of the plurality of perspectives to a viewer, said first perspective comprising a first perspective of a portion of the program;

storing at least one of the plurality of perspectives;

receiving input from a viewer which indicates a desire to replay the portion of the program from a second perspective of the plurality of perspectives;

identifying in the first perspective a first point in time in the program which corresponds to the beginning of said portion, responsive to the input;

automatically determining a second point in time in the second perspective, wherein the second point in time comprises an approximation of the first point in time in the program;

presenting the portion of the program from the second perspective to the viewer beginning at the second point in time; and

periodically storing broadcast meta-data corresponding to each of one or more of the received plurality of perspectives of the program, said meta-data comprising at least time and/or offset information for each of the corresponding one or more plurality of perspectives.

46. (Original) The computer program product as recited in claim 45, wherein the presenting the first perspective and storing are performed simultaneously.

47. (Previously Presented) The computer program product as recited in claim 45, wherein identifying the first point in time in the first perspective comprises identifying a first offset in a stored file corresponding to the first perspective.

48. (Original) The computer program product as recited in claim 45, wherein presenting at least one of the plurality of perspectives includes presenting at least one of the stored perspectives.

49. (Original) The computer program product as recited in claim 48, wherein presenting at least one of the plurality of perspectives and storing at least one of the plurality of perspectives are performed simultaneously.

50. (Previously Presented) The computer program product as recited in claim 47, wherein determining the second point in time in the second perspective comprises locating an offset in the second perspective which is near the first offset.

51. (Previously Presented) The computer program product as recited in claim 45, wherein receiving the broadcast includes simultaneously receiving a plurality of related audio and/or video streams, each stream including one of the perspectives.

52. (Previously Presented) The computer program product as recited in claim 47, wherein determining the second point in time in the second perspective comprises:

searching stored meta-data to identify two consecutive offsets corresponding to the first perspective, such that the interval represented by the two consecutive offsets includes the first offset;

utilizing a stored time corresponding to each of the two consecutive offsets to determine an approximated point in time;

searching stored meta-data to identify two consecutive times corresponding to the second perspective, such that the interval represented by the two consecutive times includes the approximated point in time; and

utilizing a stored offset corresponding to each of the two consecutive times to determine an approximated offset;

locating an offset in the second perspective which is near the approximated offset.

53. (Original) The computer program product as recited in claim 45, wherein presenting the first perspective includes presenting the first perspective in one window of a display and presenting at least one of the plurality of perspectives includes presenting a second perspective from the plurality of stored perspectives in a different window of the display.

54. (Original) The computer program product as recited in claim 45, wherein storing at least one of the plurality of perspectives includes storing the perspectives in at least one circular buffer.

55. (Previously Presented) The method as recited in claim 12, wherein receiving the broadcast includes simultaneously receiving a plurality of related video streams, each stream including one of the perspectives, wherein said streams do not have a same bit rate.

56. (Previously Presented) The method as recited in claim 55, wherein said locating comprises performing interpolation.

IX. EVIDENCE APPENDIX

No evidence submitted under 37 CFR §§ 1.130, 1.131 or 1.132 or otherwise entered by the Examiner is relied upon in this appeal.

X. RELATED PROCEEDINGS APPENDIX

There are no related proceedings.